Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): A method for designing a structure comprising the steps of:

discretizing the design domain of said structure by a plurality of nodes;

creating a design model by connecting adjacent nodes by beam elements and by connecting non-adjacent nodes by beam elements; and

optimizing said design model, wherein

a boundary condition is given to said design model, and

said optimization is performed by correcting the stiffness of said beam elements.

Claim 2 (Cancelled):

Claim 3 (Currently Amended): A method according to claim ~~2~~1, wherein,

said boundary condition includes an external force applied to said structure, a fixed condition, and a volume constraint; and

said optimization includes substantial removal of said beam elements.

Claim 4 (Original): A method according to claim 1, wherein,

the cross section of said beam element has a shape which can be represented by two or more design variables.

Claim 5 (Original): A method according to claim 4, wherein,

a dimension of said cross section and an angle of main axis of said cross section with respect to a coordinate system of said beam elements are determined at said optimization step.

Claim 6 (Currently Amended): A computer readable recording medium for recording a program for designing a model of a structure, characterized in that said program, when executed by a computer, causes said computer to,

discretize the design domain of said structure by a plurality of nodes;

create a design model by connecting adjacent nodes by beam elements and by connecting non-adjacent nodes by beam elements; and

optimize said design model, wherein

said program, when executed by a computer, causes said computer to perform said optimization by correcting the stiffness of said beam elements based on an input boundary condition.

Claim 7 (Cancelled):

Claim 8 (Currently Amended): A recording medium according to claim ~~7~~6, wherein,

said boundary condition includes an external force applied to said structure, a fixed condition, and a volume constraint, and

said optimization includes substantial removal of said beam elements.

Claim 9 (Original): A recording medium according to claim 6, wherein,

the cross section of said beam element has a shape which can be represented by two or more design variables.

Claim 10 (Original): A recording medium according to claim 9, wherein a dimension of said cross section and angle of main axis of said cross section with respect to a coordinate system of said beam element is determined at said optimization step.